Spring 2023 – i-Tree Open Academy
Session 2: Online with MyTree, i-Tree Design, and i-Tree Planting

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Plan for today

1. Introduce the online tree tools
2. MyTree Demo
3. i-Tree Planting Demo
4. i-Tree Design Demo
5. Comparing these online tools
The 2023 i-Tree Suite of Tools

Core individual tree tools
- i-Tree
  - MyTree
- i-Tree
  - Planting
- i-Tree
  - Design

Core canopy tools
- i-Tree
  - OurTrees
- i-Tree
  - Canopy
- i-Tree
  - Landscape

Utilities
- i-Tree
  - County
- i-Tree
  - Database
- i-Tree
  - Species

- i-Tree
  - Research Suite
- i-Tree
  - Tree Map
- i-Tree
  - API

* i-Tree Tools that can be used internationally
i-Tree Tool Relationships

**Eco:** Tree/Population Ecosystem Services Calculator

i-Tree Engine/API: Individual tree benefits and projections

- MyTree
- Planting
- Design
i-Tree model basics: data to tree benefits

Key field variables
- DBH
- Species
- Crown measurements
- Tree health
- Building interactions
- Light availability
Simple tools require simplifying assumptions

- Crown assumptions
- Less specific inputs
  - e.g. Health categories
- Fewer outputs
- Species list excludes shrubs
- Mortality assumptions
Let’s give MyTree a try
MyTree: Common uses

- Education
- Engagement
- Connect people to the benefits of the trees around them

[Photo Source: L. Paqueo 2022]

https://www.unri.org/news/treetags042019/
MyTree: Strengths and limitations

Strengths
• Simple to use
• Created for mobile devices
• Easy to grasp outputs
• Quick
• 20 year projection

Limitations
• No ability to save projects
• Not great for more than 10 trees
• No internet = no MyTree

Upcoming Features
• Mapping collected trees (in beta, trilliontrees.itreetools.org)
• Support for group projects
i-Tree Planting: Common uses

- Tracking planting projects
- LEED Certification of landscapes
- Carbon accounting
- Funding requests/reporting
- Sustainability impact reporting

Sustainability

A single Giving Grove orchard, with an average of 15 trees, has the ability to sequester approximately 2.7 tons of carbon over 25 years.

Orchard trees and shrubs remove carbon dioxide from the atmosphere through their natural process of photosynthesis. Orchard trees store carbon in their biomass including: leaves, trunk, branches, and roots. Carbon is stored in soil organic matter as a result of fallen leaves and branches.
i-Tree Planting: Strengths and limitations

Strengths
• Easily project thousands of trees
• Flexible projection length
• Editable parameters

Limitations
• Regionalized planting list
• Simplifies mortality schemes

Upcoming Features
• Ability to import
• Expanded species list
i-Tree Design: Common uses

• Connecting with property owners
• Engaging visuals
• Landscape planning
• Scenario evaluation
i-Tree Design: Strengths and limitations

**Strengths**
- Great visuals (maps, benefits web, graphs)
- Shareable report
- Interactive evaluation

**Limitations**
- Limited to a handful of buildings and few dozen trees
- Helps to have a mouse for drawing

**Upcoming Features**
- Modernization
- Expanded capacity
Flexible applications

- Compare species
- Evaluate the impact of maintenance (change condition or mortality)
- Estimate time to replacement for removed trees
- Evaluate policy decisions

18 inch red maple
$40.35 / yr in benefits

2 inch red maple
$1.64 / yr in benefits

24 times the benefits of new tree
Tool Characteristics

- **Great for groups**
- **Quickest and easiest**
- **Simple to use on a mobile device**
- **Education settings**
- **Good for up to 5-10 trees per person**

- **Perfect for planting projects**
- **Easily project hundreds of trees**
- **Ideal for carbon accounting**
- **Funding requests/reporting**
- **Use if you have many trees of each species**
- **More convenient on a desktop/laptop**

- **Great visuals**
- **Connect people to their own trees**
- **Multiple buildings and a few dozen trees**
- **Nice to have a mouse for drawing**
Give the homework a try

How:
All sessions will be streamed live via this Microsoft Teams link. Ensure you have the up-to-date session information by filling out the participant form. All sessions will be recorded and posted to this page as well as the i-Tree YouTube channel, so that you can catch up on anything you missed. There are no requirements for this course, and there will be self-directed exercises that you can use to gain experience using the tools. You are encouraged to submit any questions related to the course via info@itreetools.org, and there will be opportunities to ask questions during certain live sessions and office hours.

When:
Each session is one hour long and offered at 1:00 pm (Eastern US time).

- **March 14th – Introduction to i-Tree.** Understand the basic science of i-Tree and the USFS research behind it. Explore the relationships between the i-Tree tools and the data they provide. Start to consider which i-Tree tools will be best for the application you have in mind.
  - Video recording
  - Presenter slides
  - Self-directed exercise - Session 1
  - Q&A

- **March 21st – Online with MyTree, i-Tree Design, and i-Tree Planting.** Explore the easiest to use online i-Tree tools for individual trees. Get a better sense of their advantages and most common uses.
  - Video recording (coming soon)
  - Self-directed exercise - Session 2

https://www.itreetools.org/support/i-tree-open-academy-spring-2023